

**PATENT** 

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re p	atent application of:	)	
Jorg S	Schottek et al.	)	
Serial	No.: 10/659,163	) Exa	aminer: Caixia Lu
Filed:	September 10, 2003	) Art	Unit: 1713
For:	PROCESS FOR PREPARATION OF A	)	
	SALT-LIKE CHEMICAL COMPOUND	)	
	AND ITS USE INCATALYST SYSTEMS	)	
	FOR PREPARING POLYOLEFINS	)	

Honorable Commissioner for Patents Washington, D.C. 20231

December 8, 2003

# INFORMATION DISCLOSURE STATEMENT

This Information Disclosure Statement is being filed before the first Office action on the merits.

All the references listed in the present Information Disclosure Statement have been submitted to the Patent Office in Patent Application No. 09/798,859, filed February 22, 2001, of which the present application is a divisional. Therefore, copies of the cited references are not enclosed herewith, in compliance with 37 CFR 1.98(d).

No payment is believed to be due; however, the Commissioner is hereby authorized to charge USPTO deposit account 08-2336 any payment due and to credit any overpayment thereto.

Respectfully submitted,

# JORG SCHOTTEK ET AL.

willia 1 Pert

December B 2003 By:

(Date)

William R. Reid

Registration No. 47,894 Attorney for Applicants

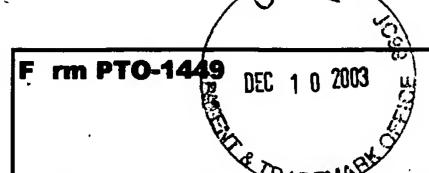
Enclosures
Basell USA Inc.
912 Appleton Road
Elkton, MD 21921

Attorney's Telephone No.: 410-996-1783

Attorney's Fax No.: 410-996-1560

I hereby certify that this correspondence is being deposited with sufficient postage thereon with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on December 8, 2003.

Date of Signature



# INF RMATI N'DISCL SURE CITATI N IN AN APPLICATI N

(Use several sheets if necessary)

US 18010 DIV

**Application Number** 

10/659,163

**Applicant** 

J rg Sch tt ket al.

Filing Date

**Group Art Unit** 

September 10, 2003

1713

### **U. S. PATENT DOCUMENTS**

DO	CU	ME	NT	MUI	E	ER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
5	3	8	4	2	9	9	01/24/95	Turner et al.	502	155	02/19/93
	┞	├	┞	╀	╀	╀		<u> </u>			· · · · · · · · · · · · · · · · · · ·
		T		$oxed{T}$	$\dagger$						
_	L	$\vdash$	$\vdash$		$\vdash$						
	H	-	-	+	f	$\dagger$					
				L							
							5 3 8 4 2 9 9				

#### **FOREIGN PATENT DOCUMENTS**

											}	Trans	lation
	DOCUMENT NUMBER							DATE COUNTRY		CLASS	SUBCLASS	YES	NO
3	5	4	3	3	1	5	0	11/06/87	DE (English Abstract)	C08F	10/02		
0	1	0	7	1	1	2	7	05/02/84	EP	C08F	10/00		
 0	1	2	9	3	(	5	8	12/27/84	EP	C08F	10/00		•
0	4	1	6	8		1	5	03/13/91	EP	C08F	10/00		
0	4	2	7	6	9	9]	7	05/15/91	EP	C08F	4/602		

## OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)

 H. H. Brintzinger et al., "Stereospezifische Olefinpolymerisation mit chiralen
Metallocenkatalysatoren;" Angew. Chem., 107: 1255-1283 (1995) (DE) (English Abstract)
H. Sinn et al., "Scope of Ziegler Catalysis;" Advances in Organometallic Chemistry, 18:
99-149 (1980)

X. Yang et al., "'Cation-like' Homogeneous Olefin Polymerization Catalysts Based upon Zirconocene Alkyls and Tris(pentafluorophenyl)borane;" J. Am. Chem. Soc., 113: 3623-3625 (1991)

**EXAMINER** 

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw lin through citation if not in conformance and not considered. In lude copy of this form with next communication to the applicant.

DEC 1 0 2003

	PTO-1449
CETRA	DEMARK

# INF RMATI N DISCLOSURE CITATI N IN AN APPLICATION

(Use several sheets if necessary)

US 18010 DIV

**Application Number** 

10/659,163

**Applicant** 

J rg S hottek tal.

**Filing Date** 

Group Art Unit

**September 10, 2003** 

1713

#### **U. S. PATENT DOCUMENTS**

EXAMINER INITIALS	DO	CU	MENT NUMBER DATE				R	DATE	NAME	CLASS	SUBCLASS	FILING DATE JBCLASS IF APPROPRIATE		
·														
1														
1, 3,00														

#### **FOREIGN PATENT DOCUMENTS**

			348-348-41			Trans	lation
DOCUMENT	T NUMBER	DATE COUNTRY		CLASS	SUBCLASS	YES	NO
0520	732	12/30/92	EP	C08F	10/00		
 0545	3 0 4	06/09/93	EP (English Abstract)	C07F	17/00		
0558	1 5 8	09/01/93	EP	C07F	17/00		
0561	4 7 9	09/22/93	EP	C07F	17/00		
0576	970	01/05/94	EP (English Abstract)	C07F	17/00		

# OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)

D. H. McConville et al., "Polymerization of α-Olefins by Chelating Diamide Complexes of Titanium;" Macromolecules, 29: 5241-5243 (1996)
D. H. McConville et al., "Living Polymerization of α-Olefins by Chelating Diamide Complexes of Titanium; J. Am. Chem. Soc., 118: 10008-10009 (1996)
M. Brookhart et al., "New Pd(II)- and Ni(II)-Based Catalysts for Polymerization of Ethylene and α-Olefins;" J. Am. Chem. Soc., 117: 6414-6415 (1995)

**EXAMINER** 

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw lin through citation if not in conformance and not consid red. Include copy of this form with next communication to the applicant.



VIA		- 13
	DTA	-1449
VI PI		- 177
* * *		. 05
	LADEN	A

# INF RMATION DISCL SURE CITATI N IN AN APPLICATION

(Use several sheets if necessary)

US 18010 DIV

**Application Number** 

10/659,163

**Applicant** 

Jorg Schottek et al.

Filing Date
September 10, 2003

Group Art Unit

1713

# **U. S. PATENT DOCUMENTS**

EXAMINER INITIALS	DO	DOCUMENT NUMBER					DOCUMENT NUMBER DAT			R	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
								-							
						Γ									
						Γ	Γ								
						Γ	Γ				-				
					Ī										

#### **FOREIGN PATENT DOCUMENTS**

												Trans	tation
	000	:UN	Œ	σ	NU	MB	ER	DATE	COUNTRY	CLASS	SUBCLASS	YES	NO
0	6	3	2	2	0	6	3	01/04/95	EP	C08F	210/02		3.00-1-
0	6	3	6	5	6	3	6	02/01/95	EP (English Abstract)	C08F	10/02		
0	6	5	9		7	5	8	06/28/95	EP (English Abstract)	C07F	17/00		
0	6	6		1	3	0	0	07/05/95	EP (English Abstract)	C08F	10/00		
 9	5	2	4	4	2	6	8	09/14/95	WO	B01J	31/02		

## OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)

	M. Brookhart et al., "Copolymerization of Ethylene and Propylene with Functionalized Vinyl Monomers by Palladium(II) Catalyts;" J. Am. Chem. Soc., 118: 267-268 (1996)
	M. Brookhart et al., "Highly Active Iron and Cobalt Catalysts for the Polymerization of Ethylene;" J. Am. Chem. Soc., 120: 4049-4050 (1998)
	V. C. Gibson et al., "Novel olefin polymerization catalysts based on iron and cobalt;"

<u>Chem. Commun.</u>, 849-850 (1998)

DATE C NSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw lin through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

**EXAMINER** 

	10	TF	E	V.
No.	DEC	1 0	2003	्रेप्ट जात

1

		السباحات أرز أيسموس
F	rm	PTO 1449

F rm.

Document Number (optional) **US 18010 DIV** 

**Application Number** 

10/659,163

# RMATI N DISCL SURE CITATI N IN AN APPLICATION

(Use several sheets if necessary)

J rg Sch ttek tal.

**Filing Date** 

**Applicant** 

**Group Art Unit** 

September 10, 2003 1713

# **U. S. PATENT DOCUMENTS**

EXAMINER INITIALS	DO	DOCUMENT NUMBER						DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
				Г									
						Γ	Г						
		<u> </u>					Г						
<del></del>							Г						
		T											
-200							M						

#### **FOREIGN PATENT DOCUMENTS**

					Translation		
DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	YES	NO	
9822486	05/28/98	WO	C07F	17/00			
 9964476	12/16/99	WO	C08F	4/603	·		
				No.			

# OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)

	Bodo Temme et al., "Oxidative η²-iminoacyl formation by reaction of amidozirconocene complexes with tris(pentafluorophenyl)borane;" <u>J. of Organomet. Chem.</u> , 448: 177-182 (1995)
	D. Röttger et al., "Reaction of dimethylzirconocene with imidazole in the presence of tris(penta-fluorophenyl)borane," <u>Journal of Organometallic Chemistry</u> , 518(1), pages 17-19 (1996)
	N. Metzler et al., "Synthesis of a silylene-borane adduct and its slow conversion to a silylborane;" Chem. Commun., 23, pages 2657-2658 (1996)

**EXAMINER** 

DATE C NSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

CEMARY OF					US 1801 Applicant		Application No.	mber 659,16	53
		DISCLOS APPLICA		ITATI N		g Schot	t k tal	i.	
(U	se severa	al sheets if	necessary	)	Filing Date September	10, 2003	Group Art U	nit 1713	
			U. S	. PATENT D	OCUMENTS				
EXAMINER INITIALS	DOCUME	NT NUMBER	DATE		AME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATI	
					·				
<u>.</u> .	+++								
			· · · · · · · · · · · · · · · · · · ·						
	+++					<u> </u>			
	+++								
			FOREI	GN PATENT	DOCUMEN	rs			
**************************************								Tran	siztion
	DOCUM	ENT NUMBER	DATE	COL	UNTRY	CLASS	SUBCLASS	YES	N
									·
<b></b>						<u> </u>			<u></u>
	OTHER	DOCUME	NTS (INCL	UDING ÀUTHO	OR, TITLE, DATE	E, PERTINE	NT PAGES, I	ETC.)	
		•			nsition-metal	-	lexes with	$B(C_6F_5)_3$	: crys
	<del></del>				ages 1309-131 cyclic Cp-Anic	<del></del>	ant l'Durralu	LP(C E )	31;
FRICTS	Tra-				Inorg. Chem.,				3]151-
902	B B B A	114			emmen e e emme si				
AMINER	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	AND (1) Z	ENCOLVE VIII	the following	LOW LAS	SIDERED			
MINER			1991	The state of the s	STATE OF THE STATE	SIVEKEÜ			